

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (canceled)

Claim 2. (currently amended) An automated stowage and retrieval system for the selective loading or unloading of a payload comprising:

a plurality of pallet carriers contained in a storage matrix, the matrix having a plurality of storage spaces and being defined by a plurality of horizontal axes, including a plurality of axes extending in a first direction and a plurality of axes extending in a second direction generally perpendicular to the first direction, each of the plurality of pallet carriers being moveable into and out of the plurality of storage spaces within the matrix, each of the pallet carriers being capable of supporting and storing at least one payload and configured to slide bi-directionally along the plurality of horizontal axes in sequentially coordinated movement with stored payloads supported on other of the plurality of pallet carriers whereby stored payloads on the pallet carriers are moved between the plurality of storage spaces to permit movement of a stored payload on another pallet carrier;

a plurality of driving mechanisms associated with the plurality of pallet carriers configured to slide each of the plurality of pallet carriers along the plurality of horizontal axes of the matrix; and

a programmable controller capable of receiving input regarding a desired payload and configured to communicate with the plurality of driving mechanisms to operably coordinate sequential movement of a selected number of the plurality of pallet carriers along the plurality of horizontal axes to move a predetermined pallet carrier having the desired payload to a predetermined position.

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Claim 3. (previously presented) The system according to claim 2, wherein the matrix is disposed in a storage compartment of a naval vessel.

Claim 4. (previously presented) The system according to claim 3, wherein the storage compartment includes holds or magazines.

Claim 5. (currently amended) The system according to claim 2, wherein the ~~pallet carriers are moveable between a plurality of zones within the matrix, the matrix having~~ comprises at least one vacant zone adapted storage space configured to the size of at least one of the plurality of pallet carriers.

Claim 6. (previously presented) The system according to claim 2, wherein the plurality of pallet carriers comprise friction reducing members.

Claim 7. (previously presented) The system according to claim 6, wherein the friction reducing members include rollers.

Claim 8. (previously presented) The system according to claim 2, wherein the plurality of pallet carriers are dimensioned according to predetermined standards.

Claim 9. (previously presented) The system according to claim 8, wherein the predetermined standards include substantially rectangular shapes.

Claim 10. (currently amended) ~~The system according to claim 2~~ An automated stowage and retrieval system for the selective loading or unloading of a payload comprising:

a plurality of pallet carriers contained in a matrix, the matrix being defined by a plurality of horizontal axes, including a plurality of axes extending in a first direction and a plurality of axes extending in a second direction generally perpendicular to the first direction,

each of the plurality of pallet carriers being capable of supporting at least one payload and configured to slide bi-directionally along the plurality of horizontal axes in sequentially coordinated movement with other of the plurality of pallet carriers, wherein each of the plurality of pallet carriers can substantially lock with each of the remaining of the plurality of pallet carriers, wherein two or more of the plurality of pallet carriers can support a common payload;

a plurality of driving mechanisms associated with the plurality of pallet carriers configured to slide each of the plurality of pallet carriers along the plurality of horizontal axes of the matrix; and

a programmable controller capable of receiving input regarding a desired payload and configured to communicate with the plurality of driving mechanisms to operably coordinate sequential movement of a selected number of the plurality of pallet carriers along the plurality of horizontal axes to move a predetermined pallet carrier having the desired payload to a predetermined position.

Claim 11. (previously presented) The system according to claim 2, wherein the at least one payload comprises one or more of cargo or weaponry.

Claim 12. (previously presented) The system according to claim 2, wherein the plurality of driving mechanisms comprises one or more drive belts, racks and pinions or other actuators.

Claim 13. (canceled)

Claim 14. (currently amended) A method of stowing and retrieving a payload comprising:

positioning a first pallet carrier at a predetermined position in a storage matrix to load or unload at least one payload associated with the first pallet carrier, the matrix having a plurality of storage spaces and being defined by a plurality of horizontal axes, including a plurality of axes extending in a first direction and a plurality of axes extending in a second direction generally perpendicular to the first direction, the matrix comprising a plurality of pallet carriers each being moveable into and out of the plurality of storage spaces within the matrix, each of the pallet carriers being capable of supporting and storing at least one payload and configured to slide bi-directionally along the plurality of horizontal axes in sequentially coordinated movement with stored payloads supported on other of the plurality of pallet carriers whereby stored payloads on the pallet carriers are moved between the plurality of stored spaces to permit movement of a stored payload on another pallet carrier; and

sliding a selected number of the plurality of pallet carriers in coordinated sequential movement to move a second pallet carrier to the predetermined position to load or unload at least one payload associated with the second pallet carrier.

Claim 15. (currently amended) The method according to claim 14, wherein the ~~pallet carriers are moveable between a plurality of zones within the matrix, the matrix having~~ comprises at least one vacant ~~zone-adapted~~ storage space configured to the size of at least one of the plurality of pallet carriers.

Claim 16. (currently amended) The ~~system~~ method according to claim 14, wherein the plurality of pallet carriers comprise friction reducing members.

Claim 17. (currently amended) The ~~system~~ method according to claim 16, wherein the friction reducing members include rollers.

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Claim 18. (previously presented) The method according to claim 14, wherein the plurality of pallet carriers are dimensioned according to predetermined standards.

Claim 19. (previously presented) The method according to claim 18, wherein the predetermined standards include substantially rectangular shapes.

Claim 20. (previously presented) The method according to claim 14, wherein the sliding of the plurality of pallet carriers is provided by a plurality of driving mechanisms associated with the plurality of pallet carriers configured to slide each of the plurality of pallet carriers along the plurality of horizontal axes of the matrix.

Claim 21. (previously presented) The method according to claim 14, wherein the plurality of driving mechanisms comprises one or more drive belts, racks and pinions or other actuators.